



# Endocrine Mid-block Exam

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*432MCQs Team*

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## Anatomy

**1-Which one of the following venous sinuses is related to pituitary gland?**

A-Cavernous

B-Sagittal

C-Straight

Ans: A

**2- Which one of the following vessels forms the hypophyseal portal system?**

A-Inferior hypophyseal artery

B-Inferior hypophyseal vein

C-Superior hypophyseal artery

D-Superior hypophyseal vein

Ans: C

**3- Compression of which of the following structures could cause a bipolar hemianopia in case of hypertrophy of pituitary gland?**

A- optic chiasma

B- Diaphragma Sellae

C- Abducent nerve

D- Sphenoidal air sinuses

Ans: A

**4-Which of the following structures lies anterolaterally to the thyroid gland?**

- A- Common carotid artery
- B- Internal juglar vein
- C- Vagus nerve
- D- Sternothyroid muscle

Ans: D

**5-Which artery will be injured during ligation of inferior thyroid artery?**

- A-Glossopharyngeal nerve
- B-Recurrent laryngeal nerve
- C-External laryngeal nerve
- D-Internal laryngeal nerve

Ans: B

**6- What's the embryological origin of the inferior parathyroid bud?**

- A-1st pharyngeal pouch
- B-2nd pharyngeal pouch
- C-3rd pharyngeal pouch
- D-4th pharyngeal pouch

Ans: C

## Histology

**1-Oxytocin hormone is stored in which one of the following cells?**

- A-Pitucytes
- B-Herring body
- C-Somatotrophs
- D-Mammotrophs

Ans: B

**2-Which one of the following cell secrete vasopressin hormone?**

- A-Supraoptic nuclei
- B-Paraventricular nuclei

Ans:

**3-where does iodination of thyroglobulin occurs?**

- A-In between the thyroid follicles
- B-In the follicular cells
- C-In the lumen of thyroid follicles
- D-In the parafollicular cells

Ans: C

**4-Which one of the following cells secret parathyroid hormone?**

A-Chief

B-Follicular

C-Oxyphil

D-Parafollicular

Ans: A

**5-Which one of the following structures is found in parathyroid gland?**

A-Colloid

B-Follicular cells

C-Parafollicular cells

D-Oxyphil

Ans: D

## Biochemistry

**1- A 55 year-old female came to the clinic feels tired and chill even in a hot weather. The physician ordered "the thyroid function test" because he noticed a thyroid enlargement ( the results are shown below).**

TSH	Elevated
Total T4	Within reference limit
Cholesterol	Borderline high
Antibodies against TSH receptor	negative

What is the most likely diagnosis of this patient?

A-Developing hypothyroidism

B-Hypothyroidism

C-Thyroid cancer

D-Thyroiditis

Ans: A

**2- which one of the followings is the biologically active form of the thyroid hormones ?**

A-T3

B-T4

C-reverse T3.

D-calcitonin

Ans: B

**3- Which one of the following tests is significant for the diagnosis of thyroid disorders?**

A-T4 and T3

B-TSH and rT

C-TSH and T4

Ans: C

**4- Which one of the following is amino acid hormone?**

A- Follicle stimulating hormone

B- Growth hormone

C- Thyroxine

D- Testosterone

Ans: C

**5- Which of the following lab results are findings in primary hyperthyroidism?**

A- HighT4, high T3, low TSH

B- HighT4, low T3, low TSH

C- Low T4, high T3, low TSH

D- Low T4, low T3, low TSH

Ans: A

**6- Which one of the following hormones use G-coupling protein :**

A- Estrogen

B- Retinoic acid

C- Insulin

D- Calcitonin

Ans: D



## Physiology

**1-Syndrome of inappropriate antidiuretic hormone ( SIADH )characterized by one of the following:**

- A-hyponatremia
- B-Hyposmolarity
- C-Hyperchloremia
- D-Hypotension

Ans: B

**2-An increase in prolactin secretion will result in which of the following clinical presentation?**

- A-Galactorrhea
- B-hypee-glucemia
- C-hypertension
- D-hypovolemia

Ans: A

**3-which of the following hormones is synthesised by hypothalamus?**

- A. Adenocorticotropin hormone.
- B. Growth hormone.
- C. oxytocin.
- D. Prolactin

Ans: C

**4- Defective increase in the thickening of membranous bones after puberty is due to increase in which hormone?**

A-Growth hormone

B-Thyroxine

Ans: A

**5-Which one of the following chemical messenger systems is secreted into ECF that affects neighbouring cells?**

A. Autocrine

B. Endocrine

C. Neuroendocrine

D. Paracrine

Ans: D

**6- Which one of the following 2<sup>nd</sup> messengers mediates the action of ANP?**

A-cAMP

B-cGMP

C-Inositol triphosphate

D-tyrosine kinase cascade

Ans: B

**7-Which one of the following would raise T4 in the serum?**

A-Increase thyroxine-binding globulin

B-deficiency of I

C-Propylthiouracil

D-Thioanate

Ans: A

**8-Which of the following hormon deficiency in infancy will leads to mental retardation?**

A- cortisol

B- growth hormon

C- thyroxine

Ans: C

**9-Which of the following effects is produced by oxytocin?**

A) Stimulate milk production

B) Stimulate uterine contraction

C) Increase blood sodium level

D) Regulates blood pressure

Ans: B

**10-Which one if the following hormones utilize tyrosine kinase system?**

A-Cortisol

B-Estrogen

C-Insulin

D-Thyroxin

Ans: C

**11- Which one of the following hormones utilized 2nd messenger mechanism?**

- A. Thyroxin
- B. Estrogen
- C. Cortisol
- D. Prolactin

Ans. D.

**12- One of the features of hypothyroidism is:**

- A-constipation
- B-heat intolerance
- C-increase in cardiac output

Ans: A

**13-Which one of the following enzymes is required for the synthesis of c-AMP?**

- A- adenylate cyclase
- B- guanylate cyclase

Ans: A

**14-Which of the following inhibits ADH secretion:**

- A. Alcohol intake
- B. Dehydration
- C. Increased osmolality
- D. Low blood pressure

Ans: A

**15- Which one of the following is manifestation of patients with DI?**

A- hypertension

B- Polyuria

C- Weight gain

Ans: B

**16- Which of the following Secretion of hormones in direct response to changing in blood levels of ions and nutrients:**

A- Humoral Stimuli

B- Neural Stimuli

C- Hormonal Stimuli

Ans: A

## Pathology

**1-A 28-year-old woman complained from enlarged thyroid gland associated with unexplained tremor and excessive sweating. A thyroidectomy was performed and showed thyroid follicle with prominent infolding which are lined by cuboidal to columnar cells with vacuolated colloid in the lumen. What is the most likely diagnosis?**

A-Hashimoto's thyroiditis

B-Papillary carcinoma

C-Nodular colloid goiter

D-Thyrotoxicosis

Ans: D

**2-A 38 year-old woman was referred to the endocrinologist because of diffuse thyroid enlargement. Thyroid function tests were consistent with hypothyroidism. Biopsy showed numerous mature lymphocytes, plasma cells and benign thyroid follicles showing Hurthle cell change.**

**Which of the following is the most likely etiology for the patient's disease?**

A.Dietary deficiency of Iodine.

B.Autoimmune destruction of thyroid follicles.

C.Idiopathic hypothyroidism.

D.Neoplastic proliferation of B lymphocyte.

Ans: B

**3-What is the most common etiology of the endemic colloid goitor?**

A- Iodine deficiency

B- radioactive iodine

Ans: A

**4-The least common carcinoma in general practice?**

A-Follicular carcinoma

B-Papillary carcinoma

C-Asaplastic carcinoma

D-Medullary carcinoma

Ans: C

**5- A 25 year old female presents with solatiry nodule. Two of her sisters were diagnosed with parathyiod adenoma and phenochromocytoma respectively. The most likely diagnosis is:**

A-Folicullar carcinoma

B-Folicullar adenoma

C-Medullary carcinoma

Ans: C

**6- A 24 years old male has solitary thyroid lesion which was reported as colloid nodule on the thyroid imaging scan. The lesion was later on excised & histopathological exam shows encapsulated neoplasm consist of intact of fibrous capsule & neumerous thyroid follicular lined by uniform cells & minimal polymorphism. Which ONE of the following is likely the diagnosis:**

A-Follicular Adenoma

B-Papillary carcinoma

C-Follicular carcinoma

D-Multi nodular goiter

Ans: A



## Pharmacology

**1-What is the mechanism of action of methimazole?**

- A- Block release of TSH
- B- Block uptake of iodide
- C- Inhibit thyroid peroxidase
- D- Inhibit thyrosine hydroxylase

Ans: C

**2- for which one of the following purposes, high iodine needed to control a case of hyperthyroidism:**

- A- Inhibit thyroxine release from thyroid
- B- to replace salts lost by sweating
- C- to prevent cardiac manifestations
- D-to replenish depleted iodine stores

Ans: A

**3-Which one of the following is an adverse effect of PTU?**

- A-agranulocytosis
- B-matallic taste
- C-photosensitivity
- D-renal toxicity

Ans:

**4- Which one of the following drugs is used to treat congenital hypothyroidism?**

A-Iodate

B-Levothyroxine

C-Methimazole

D-Propanolol

Ans: B

**5-In which one of the following conditions, liothyronine should be avoided?**

A-Renal impairment

B-Hemophilic patients

C-Hepatic failure

D-Heart failure

Ans: D

**6- A patient has hyperthyroidism since 2 years. She hasn't responded to treatment so her doctor suggested surgery. What drug should be given prior to her surgery to reduce the vascularity and size of thyroid?**

A- potassium iodide

B- propylthiouracyl

C- radioactive iodide

Ans: A

## Medicine

**1-A 25 year old female has amenorrhea, galactorrhea, decreased vision & severe headache, which one of the following hormone we should tested?**

A-Prolactin

B-Growth hormaone

Ans: A

**2- Dwarfism occurs due to defect in which of the following receptors (hormones):**

A- Testosterone

B- Calcitonin

C- IGF-I

D- Insulin

Ans: C

**3- A 13 year old boy came with his mother to your clinic and he was diagnosed with growth hormone deficiency which one of the following features he must has:**

A-Short stature

**4-45-year-old man, presented with 2 years history of increase in size of his hands & feet. His friends noticed a change in his facial feature & spacing of his teeth. What is the most likely diagnosis?**

A-ACTH-secreting adenoma

B- Growth hormone secreting adenoma

C- Prolactin secreting adenoma

D- TSH-secreting adenoma

Ans: B